

**AMENDMENTS TO THE CLAIMS:**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

**LISTING OF CLAIMS:**

1. (Canceled).

2. (Currently Amended) An information recording/reproducing system according to ~~claim 4~~claim 5,

wherein said magnetic disk apparatus and said host system include authentication key recording means for recording said authentication key, respectively, authentication data generating means for generating authentication data on the basis of said authentication key, respectively, and at least one access control means for controlling access of said host system to information of said magnetic disk apparatus on the basis of the authentication of said magnetic disk apparatus.

3. (Canceled).

4. (Canceled)

5. (Previously Presented) An information recording/reproducing system comprising:

a magnetic disk apparatus for recording/ reproducing information and a host system to which said magnetic disk apparatus can be removably connected,

said host system being capable of accessing said magnetic disk apparatus for recording/reproduction of the information,

wherein said magnetic disk apparatus includes:

a magnetic disk, and

authentication key generating means for generating an authentication key on the basis of physical characteristic of said magnetic disk apparatus itself, and

wherein said authentication key is generated on the basis of an eccentricity compensating signal for compensating for eccentricity characteristic of a magnetic disk which said magnetic disk apparatus includes.

6. (Previously Presented) An information recording/reproducing system comprising:

a magnetic disk apparatus for recording/ reproducing information and a host system to which said magnetic disk apparatus can be removably connected, said host system being capable of accessing said magnetic disk apparatus for recording/reproduction of the information,

wherein said magnetic disk apparatus includes:

a magnetic disk, and

authentication key generating means for generating an authentication key on the basis of physical characteristic of said magnetic disk apparatus itself, and

wherein said authentication key is generated on the basis of result of wavelet transformation of an eccentricity compensating signal for compensating

for eccentricity characteristic of a magnetic disk which said magnetic disk apparatus includes.

7. (Previously Presented) An information recording/reproducing system comprising:

a magnetic disk apparatus for recording/ reproducing information and a host system to which said magnetic disk apparatus can be removably connected, said host system being capable of accessing said magnetic disk apparatus for recording/reproduction of the information,

wherein said magnetic disk apparatus includes:

a magnetic disk, and

authentication key generating means for generating an authentication key on the basis of physical characteristic of said magnetic disk apparatus itself, and

wherein said authentication key is generated on the basis of eccentricity compensating signals generated for different cylinders at three locations at the most.

8. (Previously Presented) An information recording/reproducing system comprising:

a magnetic disk apparatus for recording/ reproducing information and a host system to which said magnetic disk apparatus can be removably connected, said host system being capable of accessing said magnetic disk apparatus for recording/reproduction of the information,

wherein said magnetic disk apparatus comprises:

a magnetic disk,

authentication key generating means for generating an authentication key on the basis of physical characteristic of said magnetic disk apparatus itself,

means for generating an eccentricity compensating signal for compensating for eccentricity of a magnetic disk which said magnetic disk apparatus includes,

means for enciphering said eccentricity compensating signal on the basis of said authentication key,

means for recording said eccentricity compensating signal enciphered, and

means for deciphering said enciphered eccentricity compensating signal to thereby restore the eccentricity compensating signal before having been enciphered on the basis of said authentication key.

9. (Canceled)